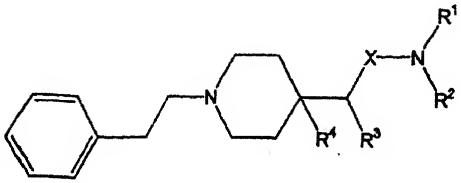
II. CLAIM AMENDMENTS

1. (Currently Amended) Substituted 1-phenethylpiperidine compounds of the general formula I



I,

in which

X denotes a methylene (CH_2) ~~or carbonyl (C=O)~~ group,

R^1 denotes an optionally at least mono-substituted aryl or heteroaryl residue,

R^2 denotes H, COR^5, SO_2R^5, an optionally at least mono— substituted, saturated, branched or unbranched aliphatic C_{1-10} residue, an optionally at least mono-substituted, at least mono-unsaturated, branched or unbranched aliphatic C_{2-10} residue, an optionally at least mono-substituted, saturated or at least mono-unsaturated cycloaliphatic C_{3-8} residue, an optionally at least mono-substituted aryl or heteroaryl residue or an optionally at least mono—substituted aryl or heteroaryl residue attached via a C_{1-3} alkylene group, R^3 and R^4 each separately denote H or together denote a bond,

R^5 denotes an optionally at least mono—substituted, saturated, branched or unbranched aliphatic C_{1-10} residue, an optionally at least mono-substituted, at least mono-unsaturated, branched or unbranched aliphatic C_{2-10} residue, an optionally at least mono—substituted, saturated or at least mono-unsaturated cycloaliphatic C_{3-8} residue, an optionally at least mono-substituted aryl or heteroaryl residue or an optionally at least mono—substituted aryl or heteroaryl residue attached via a C_{1-3} alkylene group,

as a free base or a corresponding physiologically acceptable salt and corresponding racemates, enantiomers and diastereomers.

2. (Original) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that X denotes a methylene (CH_2) group.

3. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that R1 denotes an optionally at least mono—substituted aryl ~~residue~~.

4. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that R^2 denotes H, COR^5, SO_2R^5 or denotes a C_{1-6} alkyl ~~residue~~, preferably denotes H or COR^5.

5. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that ~~the residues~~ R^3 and R^4 each denote H.

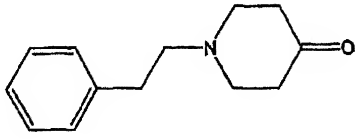
6. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that the ~~residue~~ R^5 denotes a C_{1-6} alkyl ~~residue~~ or denotes an unsubstituted or at least mono-substituted aryl ~~residue~~.

7. (New) Substituted 1-phenethylpiperidine compounds according to claim 8, where

the R^5 denotes a C_{1-6} alkyl.

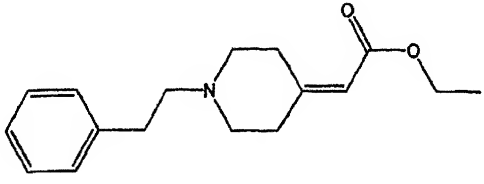
8. (Currently Amended) A process for the production of substituted 1-phenethylpiperidine compounds of the ~~general~~ formula I according to claim 1, characterised in that

(a) 1-phenethylpiperidin-4—one of the formula II



II

is reacted with triethyl phosphonoacetate in solution to yield (l-phenethylpiperidin-4-ylidene)-ethyl acetate of the formula III

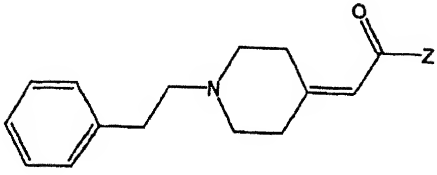


III

and this is optionally purified in accordance with conventional methods and/or

optionally isolated in accordance with conventional methods,

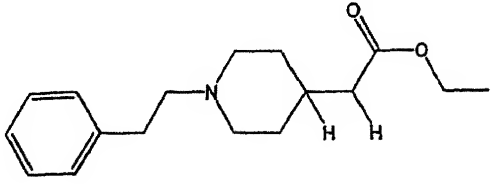
(b) optionally the (1—phenethylpiperidin-4-ylidene)—ethyl acetate of the formula III is converted in accordance with conventional methods into a compound of the general formula IV,



IV

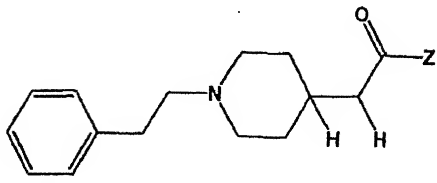
in which Z denotes a group which activates the carbonyl carbon atom for reaction with an amine, the compound of the general formula IV thus obtained is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods,

(c) optionally at least one of the compounds of the formula III or IV in solution is reduced to yield a corresponding compound of the general formula III'



III'

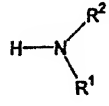
or to yield a corresponding compound of the general formula IV'



IV'

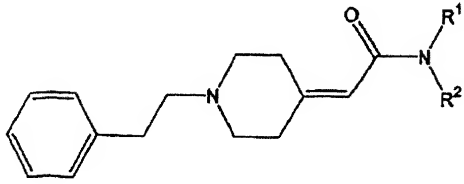
and the corresponding compound is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(d) at least one compound of the formula III, III', IV and IV' in solution is reacted with a primary or secondary amine of the general formula V,



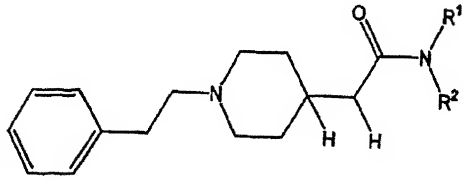
V

in which R^1 and R^2 have the meaning according to the above-stated general formula I, to yield at least one compound of the general formula Id



Id

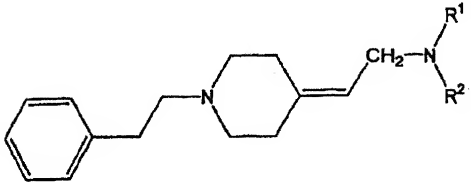
and/or at least one compound of the general formula Id'



Id'

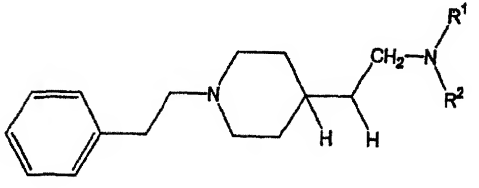
and this is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(e) optionally at least one of the compounds of the general formula Id and/or Id' is converted by reduction in solution into at least one compound of the general formula Ie



Ie

and/or at least one compound of the general formula Ie'



Ie'

in which R^1 and R^2 each have the meaning according to claim 1, and this is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(f) optionally at least one compound of the general formula Ie and/or Ie', in which the residue R^2 denotes H, is converted in accordance with conventional methods known to the person skilled in the art into at least one compound of the general formula Ie and/or Ie', in which the residue R^2 denotes COR^5, SO_2R^5, an optionally at least mono-substituted, saturated, branched or unbranched aliphatic C_{1-10} residue, an optionally at least mono-substituted, at least mono-unsaturated, branched or unbranched aliphatic C_{2-10} residue, an optionally at least mono-substituted, saturated or at least mono-unsaturated cycloaliphatic C_{3-8} residue, an optionally at least mono-substituted aryl or heteroaryl residue or denotes an optionally at least mono-substituted aryl or heteroaryl residue attached via a C_{1-3} alkylene group, wherein the residue R^5 has the above-stated meaning and this is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods.

9. (Currently Amended) A process according to claim 8, characterised in that Z denotes OH, Cl or a succinimide ~~residue~~.

10. (Currently Amended) A process according to claim 8, characterised in that the reduction to yield the compounds of formula III' or IV' is performed with hydrogen in the presence of a transition metal catalyst~~, preferably in the presence of palladium powder~~.

11. (Currently Amended) A process according to claim 8, characterised in that the reaction with a primary or secondary amine of the ~~general~~ formula V is performed in the presence of n-butyllithium.

12. (Currently Amended) A process according to claim 8, characterised in that reduction to yield a compound of the ~~general~~ formula Ie or Ie' proceeds with aluminium hydride (alane) produced in situ from lithium aluminium hydride and aluminium trichloride in an organic solvent.

13. (Previously Presented) A pharmaceutical preparation containing at least one substituted 1-phenethylpiperidine compound according to claim 1 and optionally physiologically acceptable auxiliary substances.

14-23. Cancelled

24. (Currently Amended) A method of ~~Use of at least one substituted 1-phenethylpiperidine compound according to claim 1 to produce a pharmaceutical preparation for the~~ combatting ~~of~~ pain, or treating ~~for the treatment of~~ migraine, diarrhoea, urinary incontinence, pruritus, inflammatory reactions, allergic reactions, dependency on alcohol and/or drugs and/or medicines, abuse of alcohol and/or drugs and/or medicines, inflammation or for local anesthesia comprising administering to a patient in need thereof of an effective amount of ~~a~~ pharmaceutical preparation comprising at least one substituted 1-phenethylpiperidine compound according to claim 1.

25. (New) A compound of claim 1 selected from the group consisting of
[2-(l-Phenethylpiperidin-4-yl-)ethyl]phenylamine,
(4-Methoxyphenyl)-[2-(1-phenethylpiperidin-4-yl)ethyl]amine,
2-[2-(l-Phenethylpiperidin-4-yl)ethylamino]phenol,
[2-(1-Phenethylpiperidin-4-yl)ethyl]-(3-trifluoromethylphenyl)amine,
(3-Methoxyphenyl)-[2-(1-phenethylpiperidin-4-yl)ethyl]amine,
4-[2-(1-Phenethylpiperidin-4-yl)ethylamino]phenol,
(4-Chloro-2-fluorophenyl)-[2-(1-phenethylpiperidin-4-yl) ethyl]amine,
3-[2-(l-Phenethylpiperidin-4-yl)ethylamino]phenol,

N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl) ethyl]acetamide,

N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl) ethyl] propionamide,

N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl)ethyl]benzamide,

N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-(3-trifluoromethylphenyl)acetamide,

N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-phenylacetamide,

N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-phenylbenzamide,

(4-Methylpyridin-2-yl)-[2-(1-phenethyl-piperidin-4-yl)-ethyl]amine and

(4,6-Dimethyl-pyridin-2-yl)-[2-(1-phenethylpiperidin-4-ylidene)-ethyl] amine.

27. (New) A method of combatting pain comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

28. (New) A method of treating migraine comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

29. (New) A method of treating diarrhoea comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

30. (New) A method of treating urinary incontinence comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

31. (New) A method of treating pruritus comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

32. (New) A method of treating inflammatory reactions comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

33. (New) A method of treating allergic reactions comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

34. (New) A method of treating dependency on alcohol and/or drugs and/or medicines, or abuse of alcohol and/or drugs and/or medicines, comprising administering to a patient in need thereof of an effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

35. (New) A method of treating inflammation comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

36. (New) A method of local anesthesia comprising administering to a patient in need thereof of an effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.